

Sent by CUOW  
Hr 6-002 R3  
Reference Material

# **PRESENCE/ABSENCE SURVEYS FOR SOUTHWESTERN WILLOW FLYCATCHER IN THE SAN JUAN RECOVERY UNIT, COLORADO**



Photo credit: <http://ifw2es.fws.gov/swwf/Conference.cfm>

## **Prepared for:**

**David Klute  
All Bird Conservation Coordinator  
Colorado Division of Wildlife  
6060 Broadway  
Denver, CO 80216**

## **Prepared by:**

**Ecosphere Environmental Services  
2257 Main Avenue, Patio Level  
Durango, CO 81301  
[www.ecosphere-services.com](http://www.ecosphere-services.com)**

**September 2003**

## **TABLE OF CONTENTS**

INTRODUCTION .....	1
STUDY AREA .....	2
Animas River Survey Areas.....	2
Florida River Survey Areas.....	4
Piedra River Survey Areas.....	4
Pine River Survey Areas .....	4
San Juan River Survey Areas.....	5
METHODS .....	5
RESULTS .....	6
Animas River Survey Areas.....	6
Florida River Survey Areas.....	6
Piedra River Survey Areas.....	6
Pine River Survey Areas .....	6
San Juan River Survey Areas.....	7
DISCUSSION .....	7
LITERATURE CITED .....	9
ACKNOWLEDGMENTS .....	9

## **LIST OF APPENDICES**

- A. Maps of Southwestern Willow Flycatcher survey areas in the San Juan Recovery Unit.
- B. Photographs of Southwestern Willow Flycatcher survey areas in the San Juan Recovery Unit.
- C. U.S. Fish and Wildlife Service protocol data sheets for 2003 Southwestern Willow Flycatcher surveys.
- D. Maps of Southwestern Willow Flycatcher Detections in the San Juan Recovery Unit.
- E. Avian species lists for Southwestern Willow Flycatcher survey areas in the San Juan recovery Unit.

## **LIST OF TABLES**

Table 1. UTM coordinates for Willow Flycatchers detected at LePlatt's Pond, 2003. .... 7

## **LIST OF FIGURES**

Figure 1. Distribution of Willow Flycatcher sub-species. .... 1

Figure 2. Southwestern Willow Flycatcher survey areas in the San Juan Recovery Unit. 3

Figure 3. Willow Flycatcher detection site at LePlatt's Pond, 2003..... 7

## INTRODUCTION

The Southwestern Willow Flycatcher (*Empidonax traillii extimus*) is a neotropical migratory bird currently listed as endangered under the Federal Endangered Species Act (U.S. Fish and Wildlife Service [USFWS] 1995). The Southwestern subspecies breeds in dense, shrubby habitat, usually in close proximity to water or saturated soil (Sogge et al. 1997, Sedgwick 2000), and is considered a riparian obligate in the southwestern US (Bureau of Land Management [BLM] 1998). Human disturbances to natural waterways, including damming, channelization, and dredging, have impacted flycatcher habitat, resulting in some of this species' recent decline (Sedgwick 2000). Currently, the known breeding population of the Southwestern Willow Flycatcher is estimated at 300-500 pairs (Sogge et al. 1997).

The current breeding distribution of the Southwestern Willow Flycatcher includes southern California east to Arizona, New Mexico, southern Nevada and Utah, and southwestern Colorado (Figure 1). The San Juan Recovery Unit in Southwestern Colorado, however, falls within the current boundary of the ranges of two Willow Flycatcher subspecies, the Southwestern (*E. t. extimus*) and the Great Basin/Rocky Mountain subspecies (*E. t. adastus*) (USFWS 2002). Recent research in the San Luis Valley (south-central Colorado) has identified individuals with *E. t. extimus* genes (Owen and Sogge 1997); however, other individuals have been identified as *E. t. adastus* (Paxton 2000 in USFWS 2002). Prior to 2003, there has not been a comprehensive USFWS protocol survey effort for Southwestern Willow Flycatcher in the San Juan Recovery Unit in southwestern Colorado (USFWS 2002).

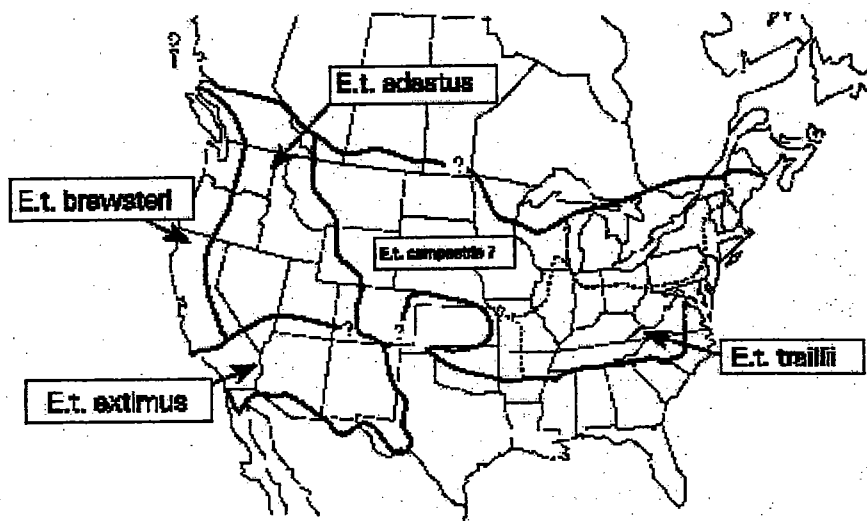


Figure 1. Distribution of Willow Flycatcher sub-species. From Sogge et al. (1997), adapted from Unit (1987) and Browning (1993).

The U.S. Fish and Wildlife Service has identified four general breeding habitat types for the Southwestern Willow Flycatcher: monotypic high-elevation willow (*Salix* sp.); monotypic exotic (e.g. saltcedar [*Tamarix* sp.] and Russian olive [*Elaeagnus angustifolia*]); native broadleaf (e.g., willow, cottonwood [*Populus* sp.], and ash [*Fraxinus* sp.]); and mixed native/exotic (Sogge et al. 1997). There are five major river drainages in southwestern Colorado that provide potential habitat for Southwestern Willow Flycatchers: the Animas, Florida, Piedra, Pine, and San Juan Rivers. Biologists from the Colorado Division of Wildlife and Ecosphere Environmental Services (Ecosphere) have identified specific areas within these drainages that contain suitable habitat for flycatchers. In 2003, Ecosphere surveyed suitable riparian habitat in the San Juan Recovery Unit for Southwestern Willow Flycatchers.

## STUDY AREA

Surveys for Southwestern Willow Flycatcher occurred within the five major river drainages in southwestern Colorado: the Animas, Florida, Piedra, Pine, and San Juan Rivers (Figure 2). Within these drainages, suitable habitat for Southwestern Willow Flycatchers occurs on lands managed by the Bureau of Reclamations (BOR), the Southern Ute Indian Tribe (SUIT), and on privately-owned land. Surveys conducted on SUIT lands are presented in a separate report (Ecosphere 2003).

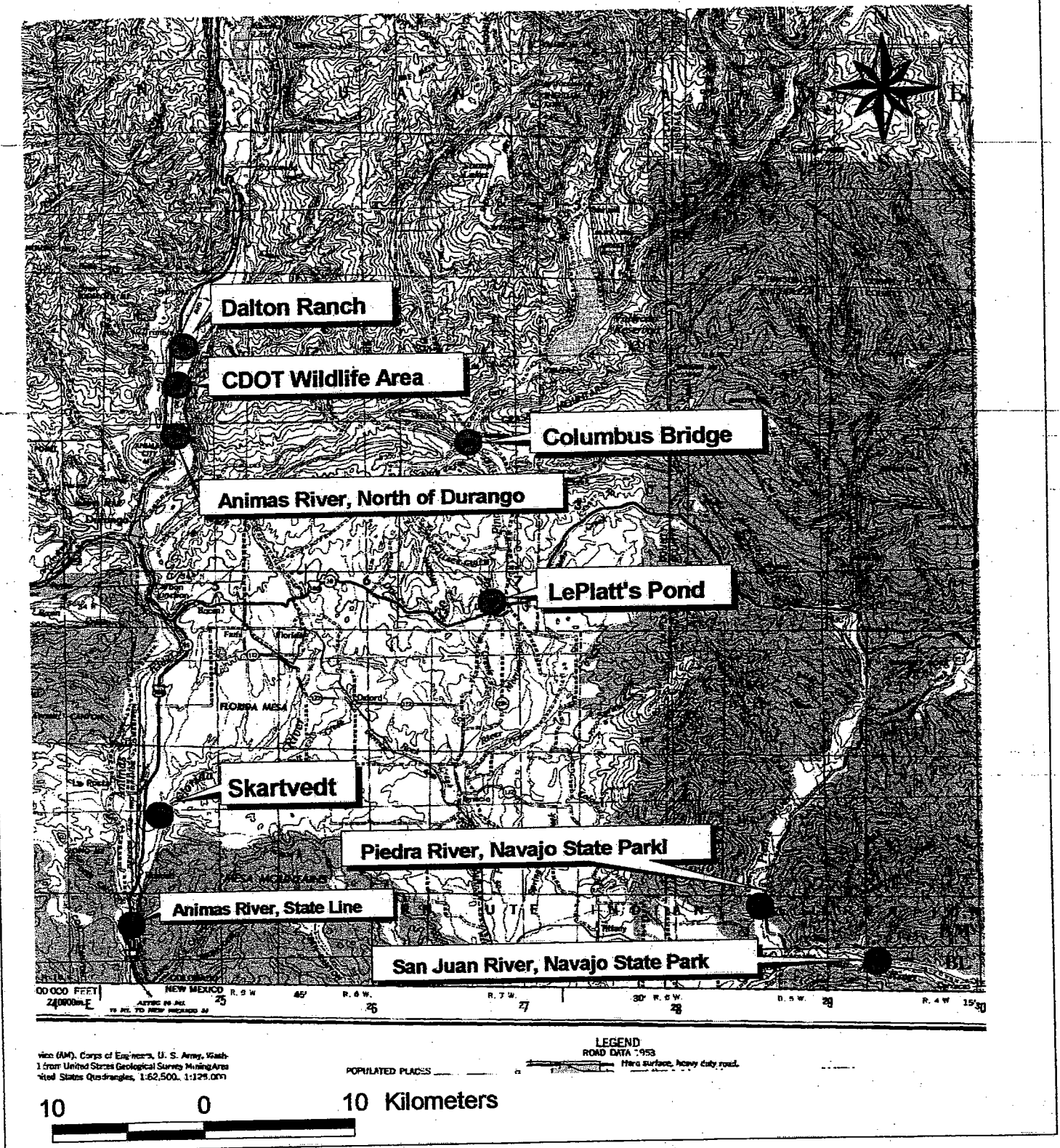
### Animas River Survey Areas

Ecosphere conducted surveys for Southwestern Willow Flycatcher at four sites along the Animas River in La Plata County (Figure 2). The survey areas are listed in geographical order, from north to south along the Animas River.

**Dalton Ranch.**—Dalton Ranch includes approximately 2.0 km of habitat along the Animas River, approximately 8.9 km north of Durango (Appendices A and B). This survey area lies within a residential area and golf course, including land managed by multiple-private landowners. Elevation is approximately 1980 m (6500 ft). Habitat at Dalton Ranch is dominated by coyote willow (*Salix exigua*) as well as a variety of other emergent wetland vegetation. Mean height of the willow habitat is approximately 3-4 m.

**CDOT Wildlife Area.**—The CDOT Wildlife Area is a wetland mitigation site west of the Animas River, approximately 6.6 km north of Durango (Appendices A and B). The CDOT site includes approximately 0.4 km of coyote willow and cattail (*Typha* sp.) habitat encompassing a small, man-made irrigation pond. Mean height of the vegetation surrounding the pond is approximately 2-3 m. Elevation at the CDOT site is approximately 2010 m (6600 ft).

**Animas River North of Durango.**—This survey area occurs on private land, and includes approximately 1.0 km of habitat in the Animas River Valley, approximately 1.9 km north of Durango (Appendices A and B). Standing ground water was present during surveys,



COLORADO

**FIGURE 2**  
**SOUTHWESTERN WILLOW FLYCATCHER**  
**SURVEY AREAS IN THE**  
**SAN JUAN RECOVERY UNIT**

Prepared By:  
Ecosphere Environmental  
Services

and dominant vegetation included coyote willow and cottonwood (*Populus* sp.), with a mean height of 2-3 m. Elevation at this survey area is approximately 2010 m (6600 ft).

*Animas River, State Line.*---The State Line survey area includes a 0.4 km stretch of habitat along the Animas River, located approximately 4.3 km north of the border between Colorado and New Mexico (Appendices A and B). Potential flycatcher habitat occurs on the west side of the Animas, between Highway 550 and the river. Elevation at this site is approximately 1740 m (5700 ft). Dominant vegetation along this stretch of the Animas includes a mix of narrowleaf cottonwood (*Populus angustifolia*), coyote willow, and Russian olive (*Elaeagnus angustifolia*). Mean height of the habitat surveyed for flycatchers was approximately 3-4 m.

### **Florida River Survey Areas**

In general, suitable habitat for Southwestern Willow Flycatcher is scarce along the Florida River. Ecosphere therefore conducted surveys at only one location along this river drainage (Figure 2).

*Skartvedt.*---The Skartvedt property is privately-owned, and includes approximately 1.3 km of potential flycatcher habitat along the Florida River, approximately 1.0 km east of Highway 550, and 18 km south of Durango (Appendices A and B). Elevation at this survey area is approximately 1740 m (5700 ft). Coyote willow and narrowleaf cottonwood dominate the riparian habitat, with heights ranging from approximately 2-5 m.

### **Piedra River Survey Areas**

Southwestern Willow Flycatcher surveys were conducted along the Piedra River, north of Navajo Reservoir, Navajo State Park. In addition, Ecosphere surveyed approximately three miles of the Piedra River north of the park, on SUIT lands. The results of the latter surveys can be found in Ecosphere (2003).

*Piedra River, Navajo State Park.*---Navajo State Park is managed by the Bureau of Reclamations. The survey site along the Piedra River occurs just north of its confluence with Navajo Reservoir, approximately 2.7 km north of Arboles (Appendices A and B). Elevation in this portion of Navajo State Park is 1860 m (6100 ft). Surveys at this site were conducted within two distinct habitat patches, one on the east and the other on the west side of the river. Total length of the survey area is approximately 0.9 km, however potential flycatcher habitat was not continuous along the river. Both habitat patches are characterized as monotypic coyote willow, with vegetation height ranging from 2-5 m.

### **Pine River Survey Areas**

The Pine River drainage contains extensive habitat that is potentially suitable for Southwestern Willow Flycatchers. Ecosphere conducted flycatcher surveys along two privately-owned sections of the Pine River in La Plata County (Figure 2). In 2003,

Ecosphere also conducted extensive surveys along on SUT lands along the Pine River. The results of survey on SUT lands can be found in Ecosphere (2003).

*Columbus Bridge*.---The Columbus Bridge survey area is privately owned by the River Ranch Housing Development. The northern boundary of the survey area occurs at Columbus Bridge on County Road 501, approximately 12.6 km north of Bayfield (Appendices A and B). From the bridge, the route continues south approximately 0.6 km along the Pine River. Elevation is approximately 2220 m (7280 ft). The riparian area is dominated by coyote willow and alder sp. (*Alnus* sp.), with several tall patches of narrowleaf cottonwood. Mean height of the surveyed habitat is approximately 5 m.

*LePlatt's Pond*.---This survey area is part of the T Bar C Ranch, located approximately 0.5 km north of Bayfield off County Road 501 (Appendices A and B). The survey route includes approximately 1.2 km of potential flycatcher habitat east of the Pine River. Elevation at the site is 2100 m (6900 ft). Dominant vegetation includes coyote willow, narrowleaf cottonwood, and alder, with a mean height of 3-5 m.

### **San Juan River Survey Areas**

The San Juan River contains fewer patches of potentially suitable habitat for Southwestern Willow Flycatchers than most of the other rivers in our study area. Therefore, Ecosphere conducted surveys at only one location along this river drainage (Figure 2).

*San Juan River, Navajo State Park*.---This portion of Navajo State Park includes 1.5 km of habitat along the San Juan River, approximately 11.2 km east of Highway 151 (Appendices A and B). Elevation here is approximately 1860 m (6100 ft). The survey area consists of two separate habitat patches on the north side of the river, dominated by coyote willow, narrowleaf cottonwood, and Fremont cottonwood (*Populus fremontii*). Mean height of the vegetation is approximately 3-5 m.

## **METHODS**

Ecosphere biologists conducted surveys for Southwestern Willow Flycatcher following the protocol developed by Sogge et al. (1997), in accordance with the Federal Endangered Species Act. The protocol involves surveying for flycatchers using the tape playback method. The presence of Willow Flycatchers was confirmed only if a bird responded to the tape by singing the distinctive song, "fitz-bew". One survey was conducted at each of the survey areas during each of the following three periods, 15-31 May, 1-21 June, and 22 June-10 July. Consecutive flycatcher surveys at each site were conducted at least five days apart from each other, and were completed between approximately 5:30 and 10:00 a.m. When Willow Flycatchers were detected, we recorded their locations in UTM's, using a Garmin Global Positioning System (GPS), and mapped these locations on USGS 7.5" quadrangle maps. Flycatchers were only considered resident potential breeders if detected during the third survey period (Sogge et al. 1997). All



flycatchers detected during periods 1 and 2 were considered migrants unless they were also observed during the third period (Sogge et al. 1997). In addition to recording the presence/absence of Southwestern Willow Flycatchers, observers also recorded other bird species seen or heard while conducting the surveys.

## RESULTS

### Animas River Survey Areas

We did not detect Willow Flycatchers at any of the four Animas River survey areas in 2003 (Appendix C). Appendix E lists all avian species detected at each survey area during our surveys.

### Florida River Survey Areas

We did not detect Willow Flycatchers at the Skartvedt property on the Florida River during surveys in 2003 (Appendix C). A list of all avian species detected during these surveys is listed in Appendix E.

### Piedra River Survey Areas

We did not confirm the presence of Willow Flycatchers along the Piedra River at Navajo State Park. We did, however, detect one *Empidonax* flycatcher during the second survey period (Appendix C). This bird exhibited the "whit" call, characteristic of several *Empidonax* species; however it did not perform the diagnostic "fitz-bew" song. Because we did not observe a "fitz-bew", we could not confirm that this bird was a Willow Flycatcher. A single territorial male Willow Flycatcher was detected on 2 separate visits (5/25, 5/27) at the patch on the west side of the river in 1999 by Ecosphere biologists under contract to the Bureau of Reclamation. Appendix E lists all avian species observed at the Piedra River survey areas while conducting surveys in 2003.

### Pine River Survey Areas

*Columbus Bridge.*—Ecosphere did not detect any Willow Flycatchers at Columbus Bridge during any of the three survey periods (Appendix C). A list of all avian species observed at this site is listed in Appendix E.

*LePlatt's Pond.*—We detected one Willow Flycatcher at LePlatt's Pond during the second survey period (Table 1, Figure 3, Appendices C-D). No flycatchers were observed at this site during the second or third survey periods. A list of all avian species detected during Southwestern Willow Flycatchers is listed in Appendix E.

Table 1. UTM coordinates for Willow Flycatchers detected at LePlatt's Pond, 2003.

Location	Survey period 1		Survey period 2		Survey period 3	
	Bird	UTM	Bird	UTM	Bird	UTM
LePlatt's Pond			1	4123683 N 0268499 E		



Figure 3. Willow Flycatcher detection site at LePlatt's Pond, 2003.

### San Juan River Survey Areas

We did not detect Willow Flycatchers at the Navajo State Park survey area along the San Juan River during our 2003 surveys (Appendix C). A list of all avian species observed at this site is listed in Appendix E.

## DISCUSSION

The results from the 2003 surveys represent the first comprehensive survey effort for Southwestern Willow Flycatchers in the Upper Colorado Recovery Unit. Although we did detect one singing flycatcher at LePlatt's Pond during the second survey period, no flycatchers were present during the third survey period. Therefore, this bird was likely just migrating through, and not breeding within the survey area (Sogge et al. 1997). Because this birds was probably a migrant, it is possible that it was not the southwestern sub-species of Willow Flycatcher, *E. t. extimus*, but rather the Great Basin/Rocky Mountain

sub-species, *E. t. adastus*, as southwestern Colorado occurs within the range boundary established for *E. t. extimus* and *E. t. adastus*. Nevertheless, the presence of Willow Flycatchers during the migratory period at LePlatt's Pond suggests that this area contains habitat both suitable and attractive for Southwestern Willow Flycatchers.

In addition to Ecosphere's survey effort for the Colorado Division of Wildlife, we were also contracted by other private companies to conduct Southwestern Willow Flycatcher surveys in southwestern Colorado in 2003. Specifically, we surveyed riparian habitat at the proposed River Trails Ranch (RTR) development on the Animas River just south of the Animas River North of Durango survey area, the La Plata River, approximately 1 mile south of Long Hollow, and in high elevation (3000 m) riparian habitat along Cement Creek in Silverton. Two Willow Flycatchers were observed singing at RTR during the second survey period, and one flycatcher was detected on the La Plata River during the first survey period. We did not, however, detect any flycatchers at Cement Creek. The results of these surveys suggest that both the Animas River Valley north of Durango and the La Plata River south of Long Hollow may provide suitable and attractive habitat for the Southwestern Willow Flycatcher.

## LITERATURE CITED

- Browning, M. R. 1993. Comments on the taxonomy of *Empidonax traillii* (willow flycatcher). *Western Birds* 24:241-257.
- Bureau of Land Management. 1998. Birds as indicators of riparian vegetation condition in the western U.S. Bureau of Land Management, Partners in Flight, Boise, Idaho. BLM/ID/PT-98/004+6635. Jamestown, ND: Northern Prairie Wildlife Research Center home page.
- Ecosphere Environmental Services. 2003. Presence/absence surveys for Southwestern Willow Flycatcher on Southern Ute Indian Tribal lands in the San Juan Recovery Unit, Colorado. Final report, Colorado Division of Wildlife, Denver, CO ?? pp.
- Owen, J. C., and M. K. Sogge. 1997. Banding and genetic sampling of Willow Flycatchers in Colorado – 1996 and 1997 summary report. U.S.G.S. Colorado Plateau Field Station/Northern Arizona University report.
- Sedgwick, J. A. 2000. Willow Flycatcher (*Empidonax traillii*). In *The birds of North America*, no. 533 (A. Poole and F. Gill, eds.). The Academy of Natural Sciences, Philadelphia, PA, and The American Ornithologists' Union, Washington, D.C.
- Sogge, M., R. M. Marshall, S. J. Sferra, and T. J. Tibbitts. 1997. A Southwestern Willow Flycatcher natural history summary and survey protocol. National Park Service Technical Report NPS/NAUCPRS/NRTR-97/12.
- Unit, P. 1987. *Empidonax traillii extimus*: An endangered subspecies. *Western Birds* 18:137-162.
- U.S. Fish and Wildlife Service. 1995. Final rule determining endangered status for the Southwestern Willow Flycatcher. *Federal Register* 60: 10694-10715 (February 27, 1995).
- U.S. Fish and Wildlife Service. 2002. Southwestern Willow Flycatcher Recovery Plan. Albuquerque, New Mexico. i-ix + 210 pp., Appendices A-O.

## ACKNOWLEDGEMENTS

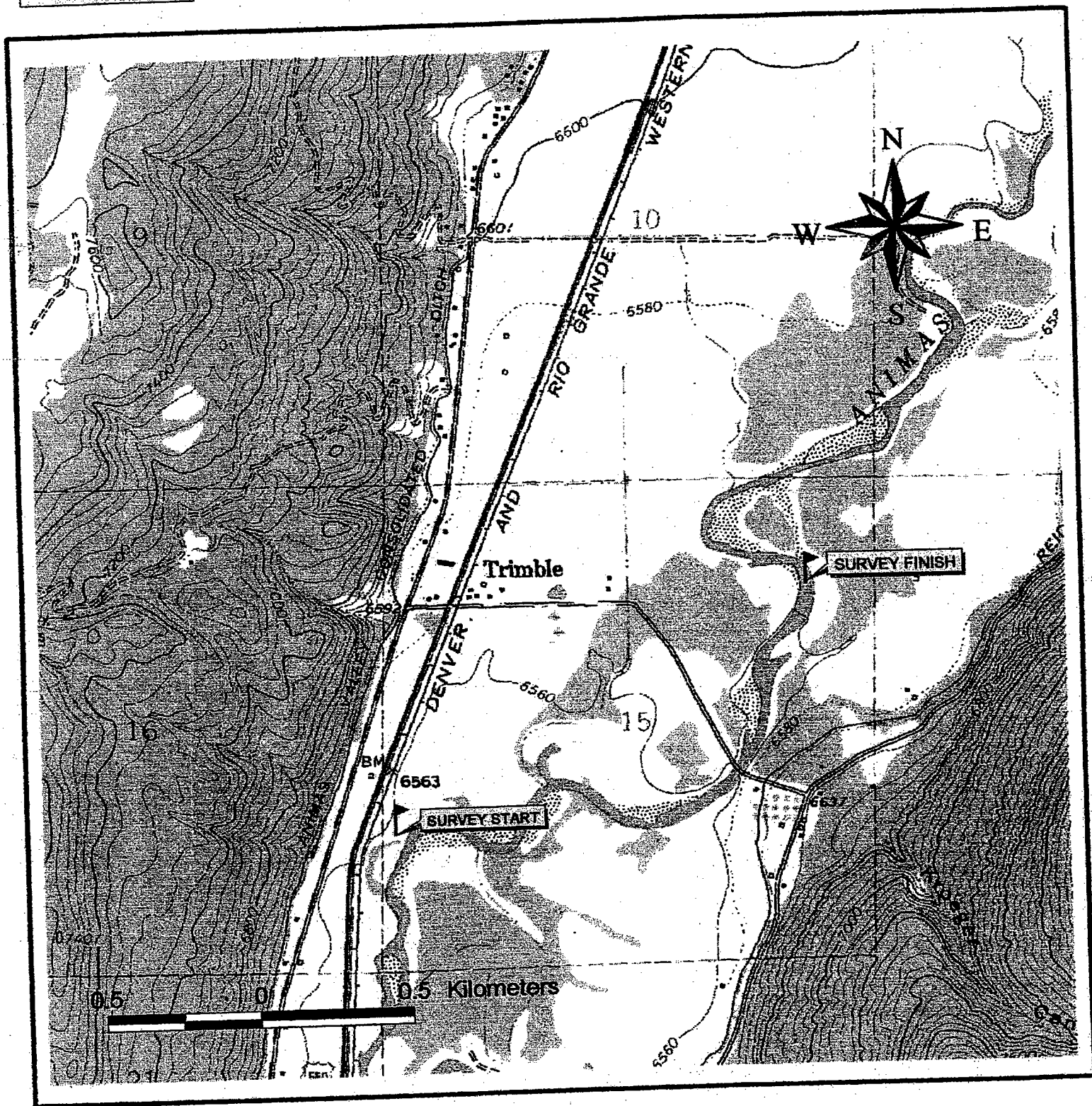
Funding for this project was provided by the Colorado Division of Wildlife (CDOW). We thank Drayton Harrison and Cary Carron of the CDOW for assistance with study area selection. We acknowledge all private landowners that granted Ecosphere permission to survey on their property. This report was written by Lynn Alterman, with editorial assistance from Mike Fitzgerald and John Wickersham. Maps were created by Carrie Radding.

## **APPENDIX A**

### **MAPS OF SOUTHWESTERN WILLOW FLYCATCHER SURVEY AREAS IN THE SAN JUAN RECOVERY UNIT**

USGS 7.5 MINUTE  
TOPOGRAPHIC  
SURVEY MAP

HERMOSA  
QUADRANGLE  
LA PLATA COUNTY  
COLORADO



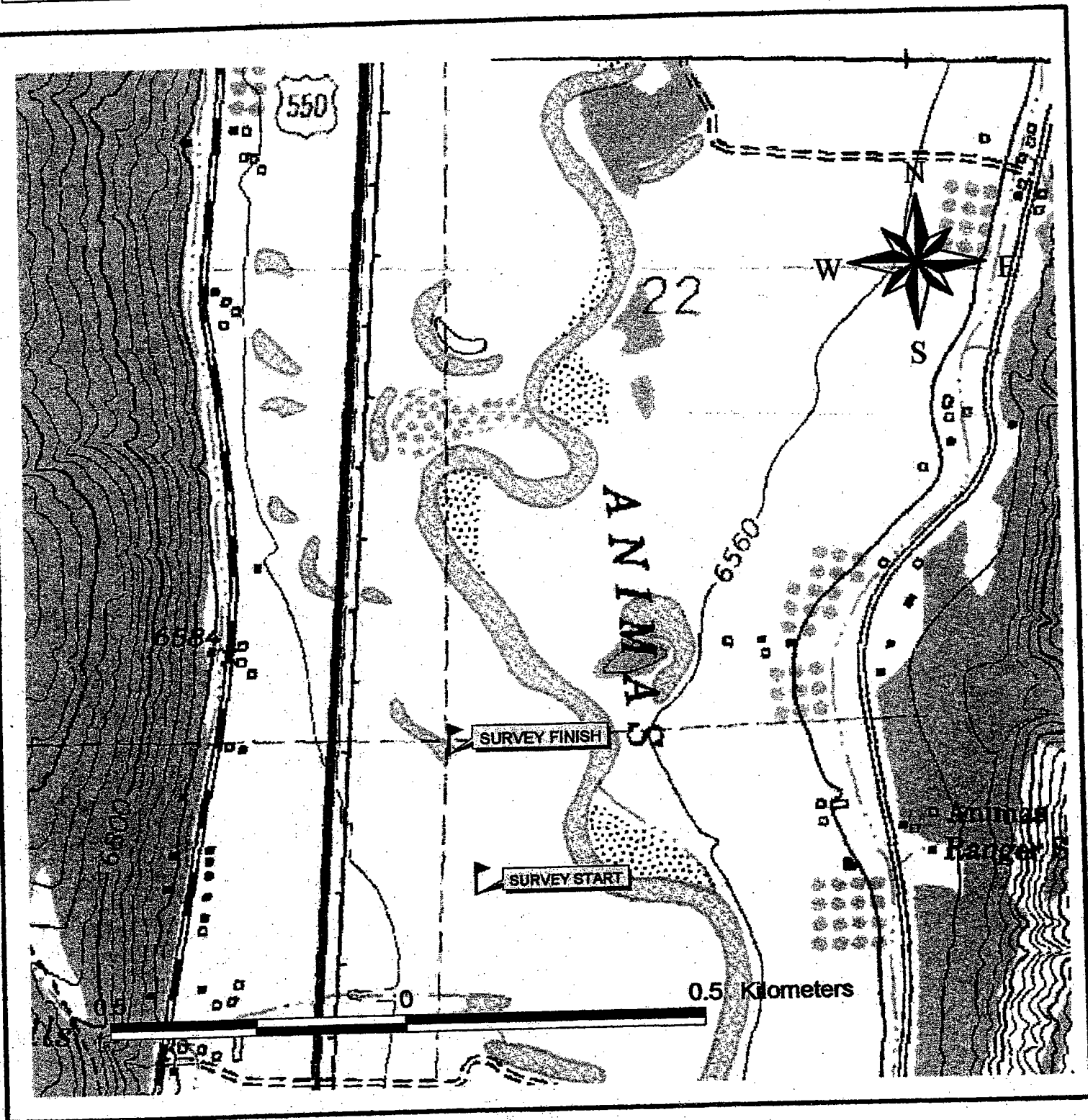
COLORADO

COLORADO DIVISION OF WILDLIFE  
SOUTHWESTERN WILLOW FLYCATCHER SURVEY AREA  
ANIMAS RIVER/DALTON RANCH SITE

SURVEY AREA  
MAP  
Prepared By:  
Ecosystem Environmental  
Services

USGS 7.5 MINUTE  
TOPOGRAPHIC  
SURVEY MAP

DURANGO EAST  
QUADRANGLE  
LA PLATA COUNTY  
COLORADO



COLORADO

COLORADO DIVISION OF WILDLIFE  
SOUTHWESTERN WILLOW FLYCATCHER SURVEY AREA  
ANIMAS RIVER/CDOT WILDLIFE AREA

SURVEY AREA  
MAP

Prepared By:  
Ecosphere Environmental  
Services



USGS 7.5 MINUTE  
TOPOGRAPHIC  
SURVEY MAP

DURANGO EAST  
QUADRANGLE  
LA PLATA COUNTY  
COLORADO



COLORADO

COLORADO DIVISION OF WILDLIFE  
SOUTHWESTERN WILLOW FLYCATCHER SURVEY AREA  
ANIMAS RIVER/NORTH OF DURANGO

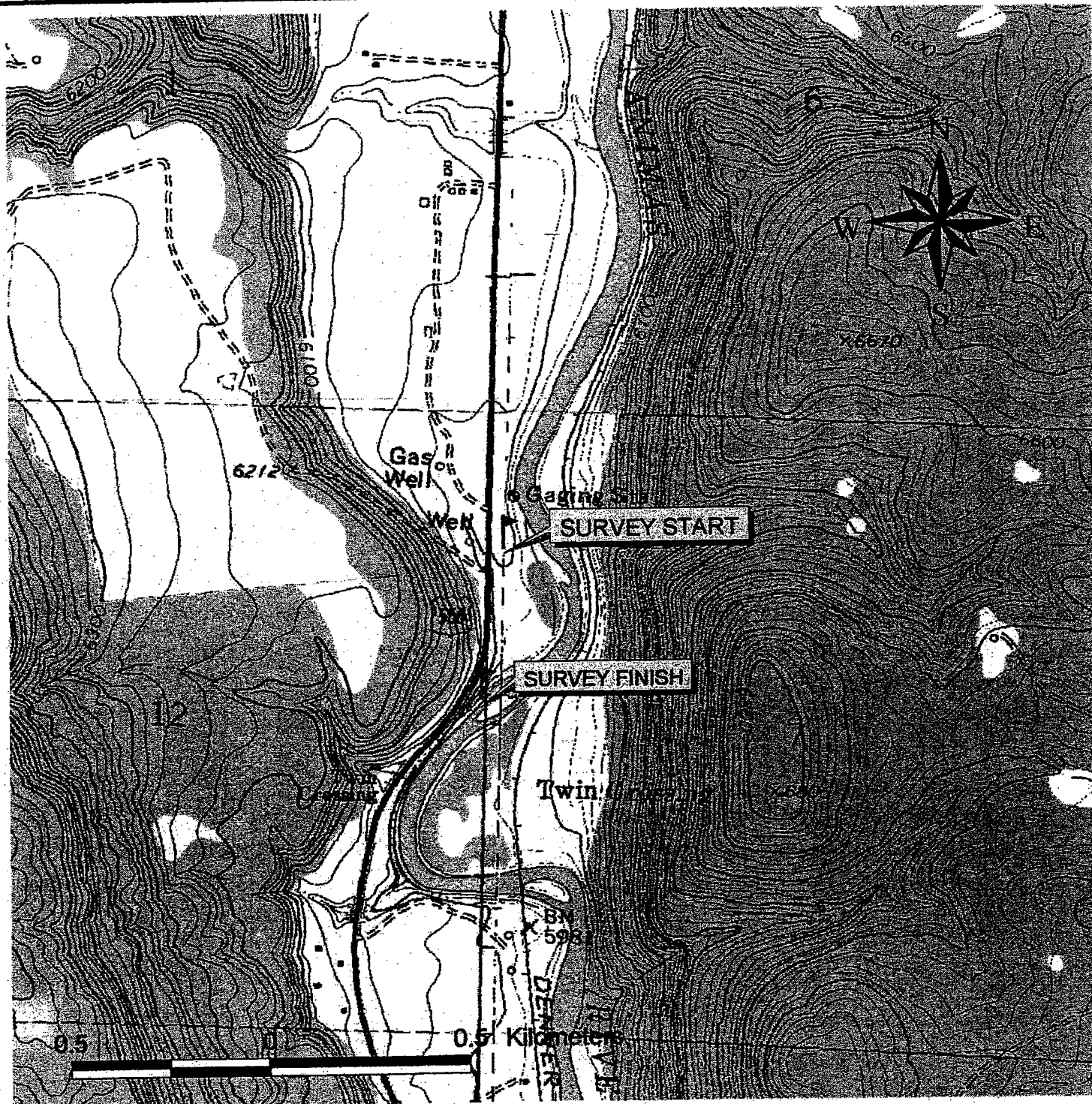
SURVEY AREA  
MAP

Prepared By:  
Ecosphere Environmental  
Services



USGS 7.5 MINUTE  
TOPOGRAPHIC  
SURVEY MAP

BONDAD HILL  
LONG MOUNTAIN  
QUADRANGLES  
LA PLATA COUNTY  
COLORADO



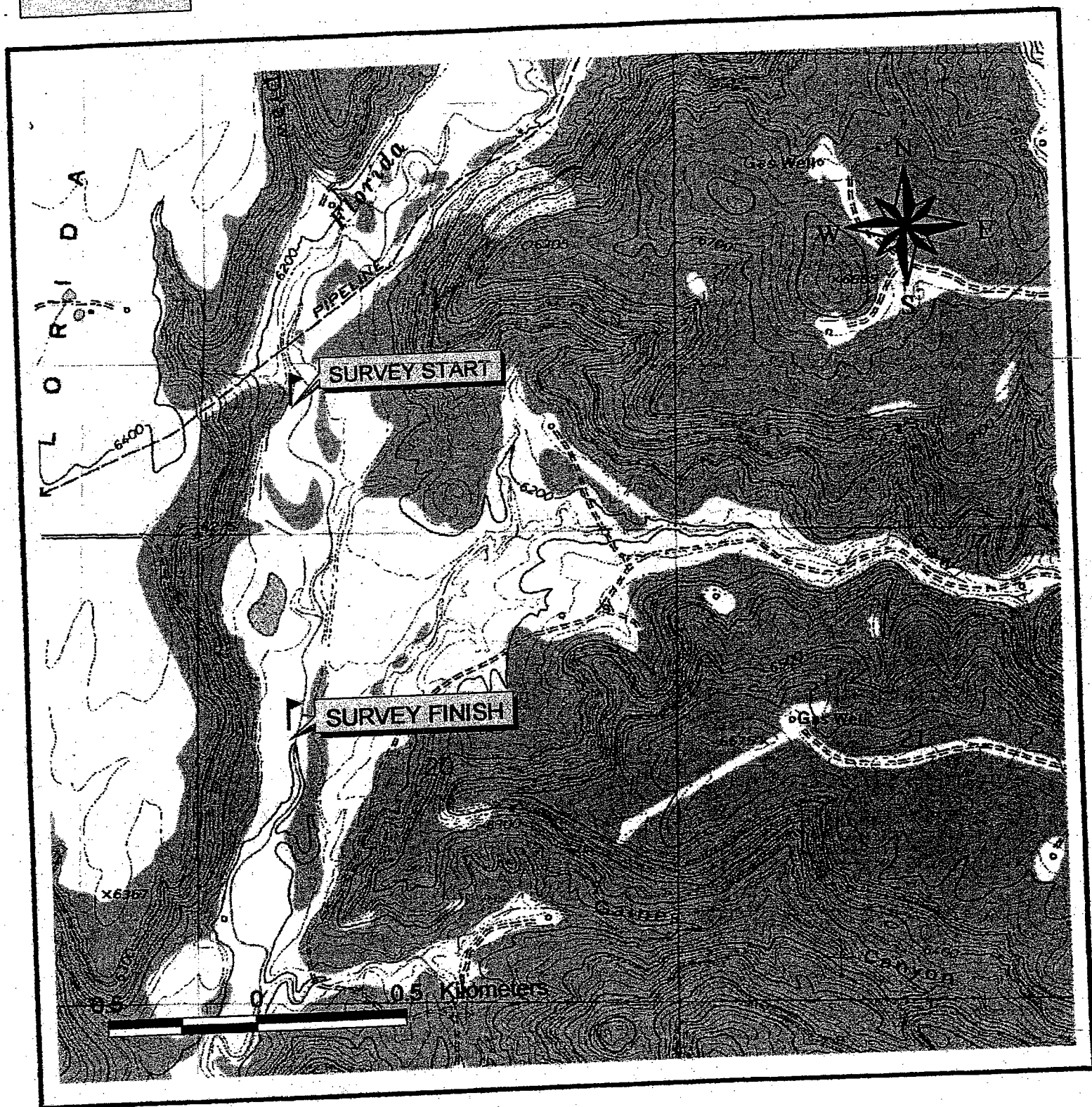
COLORADO

COLORADO DIVISION OF WILDLIFE  
SOUTHWESTERN WILLOW FLYCATCHER SURVEY AREA  
ANIMAS RIVER/STATE LINE

SURVEY AREA  
MAP  
Prepared By:  
Biosphere Environmental  
Services

USGS 7.5 MINUTE  
TOPOGRAPHIC  
SURVEY MAP

BONDAD HILL  
QUADRANGLE  
LA PLATA COUNTY  
COLORADO



COLORADO

COLORADO DIVISION OF WILDLIFE  
SOUTHWESTERN WILLOW FLYCATCHER SURVEY AREA  
FLORIDA RIVER/PETE SCARTVEDT

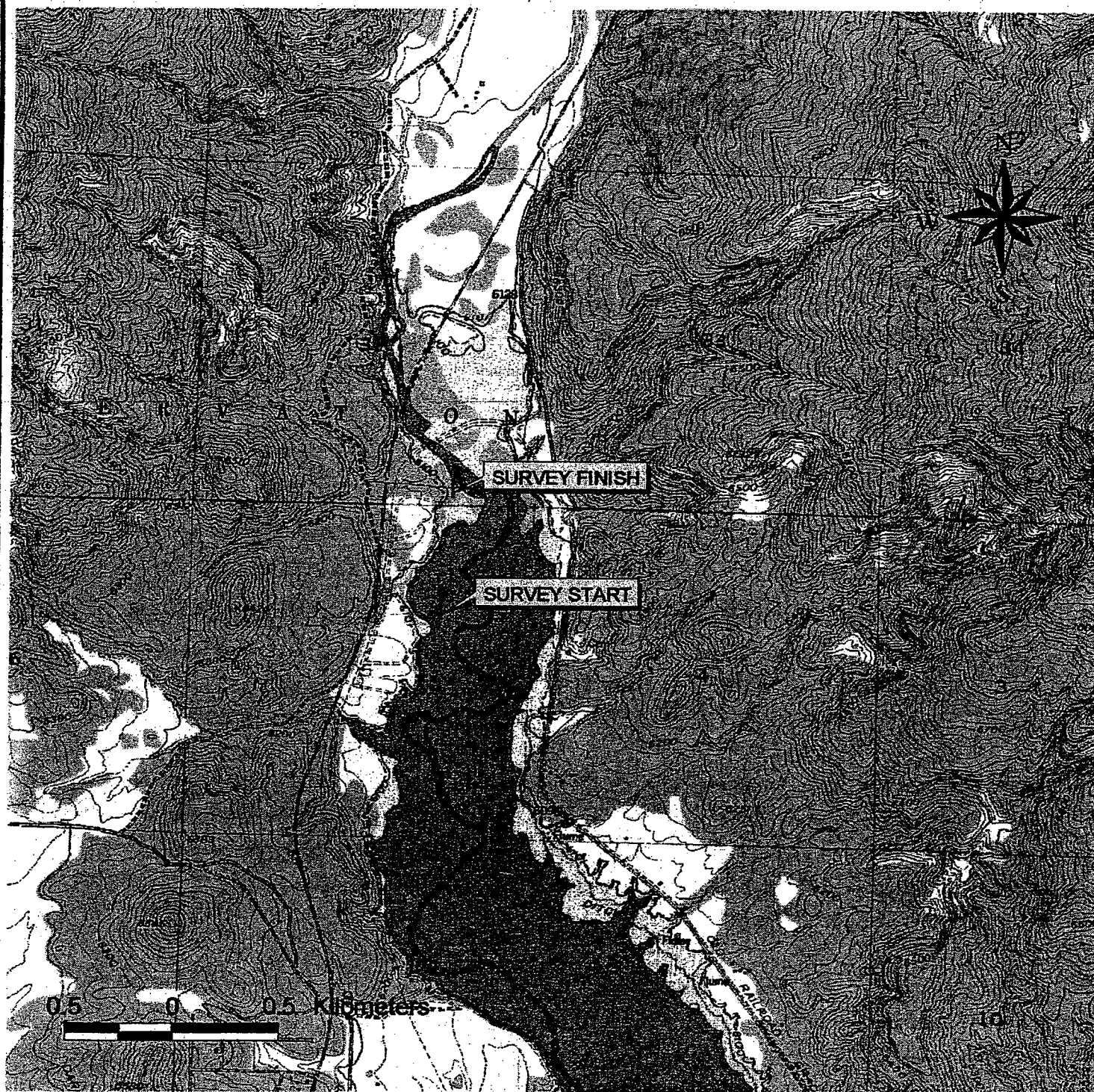
SURVEY AREA  
MAP

Prepared By:  
Ecosphere Environmental  
Services



USGS 7.5 MINUTE  
TOPOGRAPHIC  
SURVEY MAP

ALLISON  
QUADRANGLE  
ARCHULETA COUNTY  
COLORADO



COLORADO

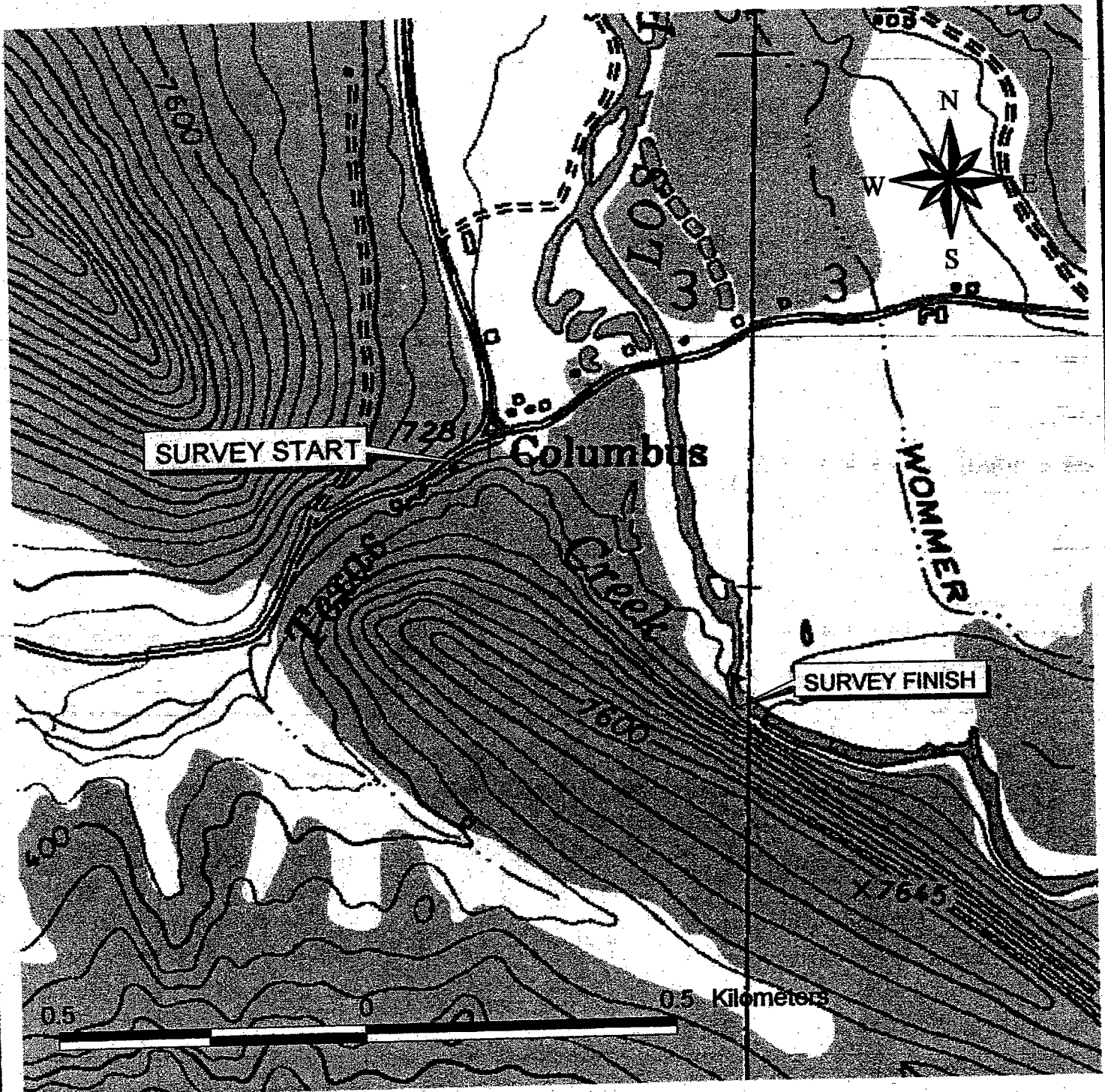
COLORADO DIVISION OF WILDLIFE  
SOUTHWESTERN WILLOW FLYCATCHER SURVEY AREA  
PIEDRA RIVER/NAVAJO STATE PARK

SURVEY AREA  
MAP

Prepared By:  
Ecosphere Environmental  
Services

USGS 7.5 MINUTE  
TOPOGRAPHIC  
SURVEY MAP

RULES HILL  
LUDWIG MOUNTAIN  
QUADRANGLES  
LA PLATA COUNTY  
COLORADO



COLORADO

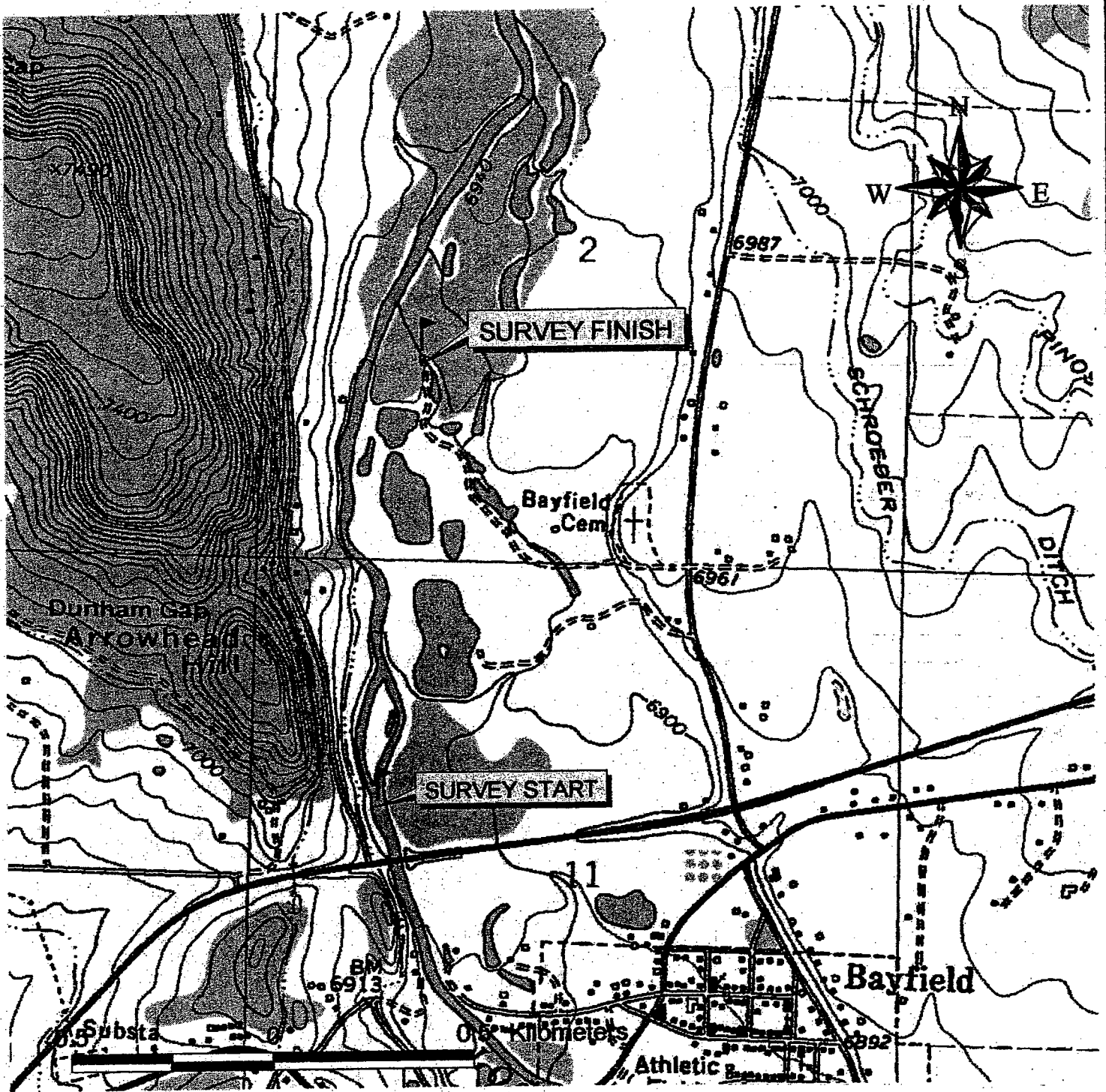
COLORADO DIVISION OF WILDLIFE  
SOUTHWESTERN WILLOW FLYCATCHER SURVEY AREA  
LOS PINOS RIVER/COLUMBUS BRIDGE S.

SURVEY AREA  
MAP

Prepared By:  
Ecosphere Environmental  
Services

USGS 7.5 MINUTE  
TOPOGRAPHIC  
SURVEY MAP

BAYFIELD  
QUADRANGLE  
LA PLATA COUNTY  
COLORADO



COLORADO

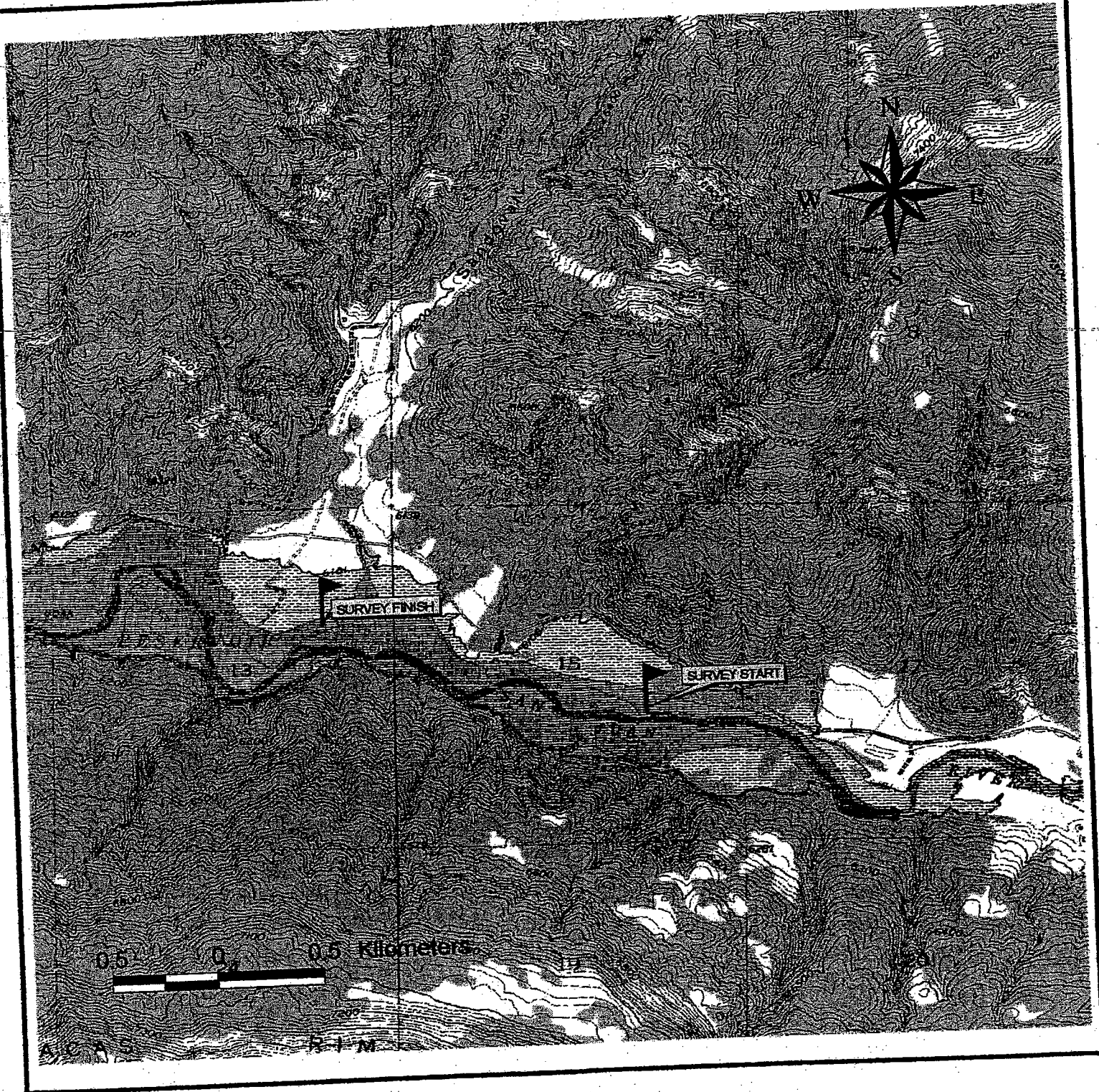
COLORADO DIVISION OF WILDLIFE  
SOUTHWESTERN WILLOW FLYCATCHER SURVEY AREA  
LOS PINOS RIVER/LE PLATT'S POND

SURVEY AREA  
MAP  
Prepared By:  
Ecosphere Environmental  
Services



USGS 7.5 MINUTE  
TOPOGRAPHIC  
SURVEY MAP

CARRACAS SW  
QUADRANGLE  
ARCHULETA COUNTY  
COLORADO



COLORADO

COLORADO DIVISION OF WILDLIFE  
SOUTHWESTERN WILLOW FLYCATCHER SURVEY AREA  
SAN JUAN RIVER/NAVAJO STATE PARK

SURVEY AREA  
MAP

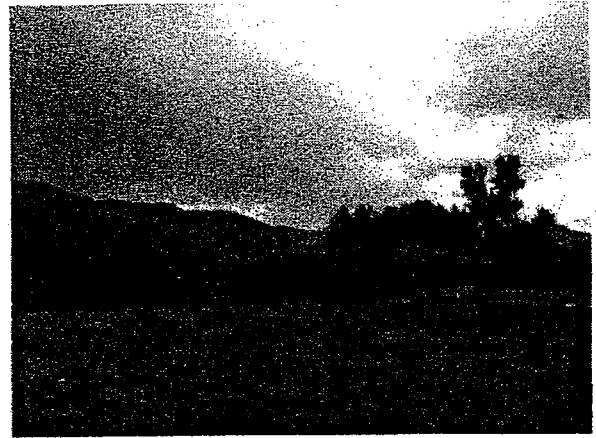
Prepared By:  
Ecosphere Environmental  
Services

## **APPENDIX B**

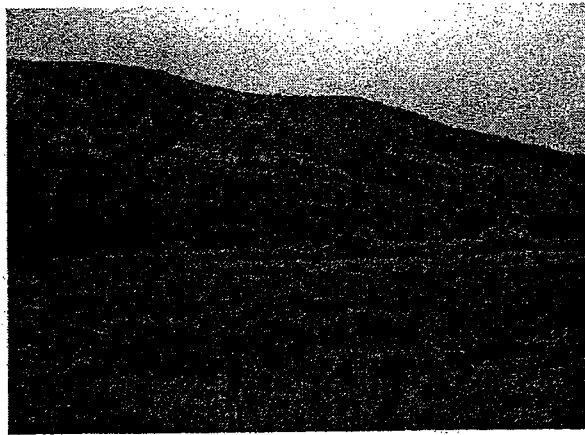
### **PHOTOGRAPHS OF SOUTHWESTERN WILLOW FLYCATCHER SURVEY** **AREAS IN THE SAN JUAN RECOVERY UNIT**



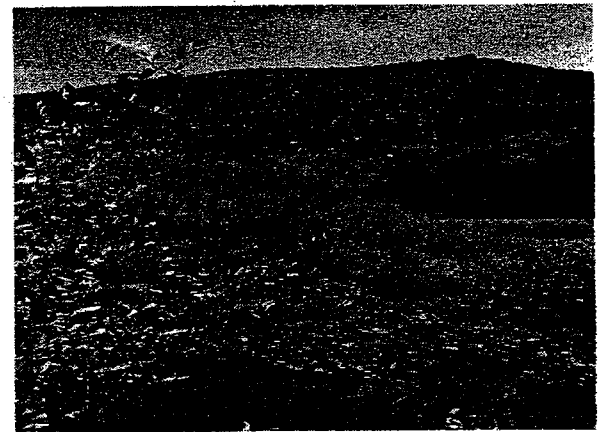
**Animas River: Dalton Ranch**



**Animas River: CDOT Wildlife Area**



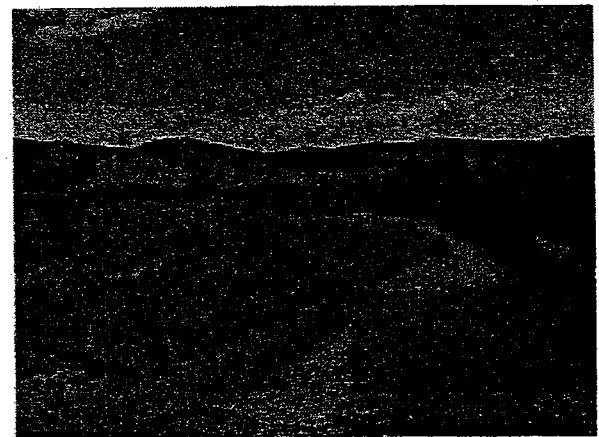
**Animas River: North of Durango**



**Animas River: State Line**

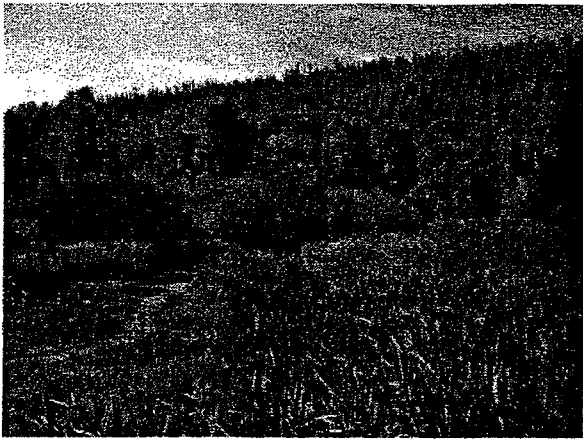


**Florida River: Skardvedt**



**Piedra River: Navajo State Park**





**Pine River: Columbus Bridge**



**Pine River: LePlatt's Pond**



**San Juan River: Navajo State Park**

## **APPENDIX C**

### **U. S. FISH AND WILDLIFE SERVICE PROTOCOL DATA SHEETS FOR 2003 SOUTHWESTERN WILLOW FLYCATCHER SURVEYS**

**Willow Flycatcher Survey and Detection Form (rev. 4/98)**

Site Name Dalton Ranch site

Was site surveyed in previous year? Yes ☐ No ☒

If yes, what site name was used? \_\_\_\_\_

County La Plata

State CO

USGS Quad Name Hermosa

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No

Site Coordinates: Start: N 4141011 E 0247792 UTM

Stop: N 4141791 E 0249114 UTM

Zone 13S

Elevation 6536 feet / meters (circle one)

**\*\* Fill in additional site information on back of this page \*\***

Survey # Observer(s)	Date (m/d/y) Survey time	Number of WIFLs Found	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N	Cowbirds Detected? Y or N	Presence of Livestock, Recent sign Y or N	Comments about this survey (e.g., evidence of pairs or breeding, number of nests, nest contents or number of fledges seen; potential threats)
1 MF	Date <u>5-18-03</u> start <u>0545</u> stop <u>0800</u> total hrs <u>2:15</u>	0	0	0	N	N	N	site is pretty noisy from Hay noise @ 0800 on.
2 JB	Date <u>6/16/03</u> Start <u>0600</u> Stop <u>0845</u> total hrs <u>33/4</u>	0	0	0	N	N	N	
3 CW	Date <u>7/2/03</u> Start <u>0800</u> Stop <u>1000</u> total hrs <u>2</u>	0	0	0	N	N	N	
	Date _____ start _____ stop _____ total hrs _____							
	Date _____ start _____ stop _____ total hrs _____							
Overall Site Summary (Total only resident WIFLs)		Adults	Pairs	Territories	Nests	Were any WIFLs color-banded? Yes No <u>NA</u> If yes, report color combination(s) in the comments section on back of form		
Total survey hrs <u>8</u>		0	0	0	0			

Name of Reporting Individual Lynn Alterman

Date Report Completed 7/25/03

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual Lynn Altermann

Phone # 970-382-7256

Affiliation Ecosphere Environmental Services

Email altermann@ecosphere-services.com

Site Name Dutton Ranch - CD

Did you verify that this site name is consistent with that used in previous years? Yes ☐ No ☒ (circle one)

Management Authority for Survey Area (circle one):

Federal Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) multiple landowners

Length of area surveyed: 1.99 km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes ☒ No ☐ If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes ☒ No ☐ If no, summarize in comments below.

Ecosphere surveyed this site in 2002 w/ negative results. However, our staff have heard WIFLs on the Dutton Ranch golf course in 2000.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants

(entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Willow

Average height of canopy: 3-4 m (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes ☒ No ☐ (circle one)

Distance from the site to surface water or saturated soil: 1 (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes ☐ No ☒ (circle one)

If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Willow Flycatcher Survey and Detection Form (rev. 4/98)**

Site Name CDOT Wildlife Area Was site surveyed in previous year? Yes ☐ No ☒  
 If yes, what site name was used? \_\_\_\_\_

County La Plata State CO USGS Quad Name Durango East

*Is copy of USGS map marked with survey area and WIFL sightings attached (as required)?* ☒ Yes ☐ No

Site Coordinates: Start: N 4,138,592 E 247,726 UTM  
 Stop: N 4,138,831 E 247,687 UTM Zone 13S  
 Elevation 6,519 feet meters (circle one)

**\*\* Fill in additional site information on back of this page \*\***

Survey # Observer(s)	Date (m/d/y) Survey time	Number of WIFLs Found	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N	Cowbirds Detected? Y or N	Presence of Livestock, Recent sign Y or N	Comments about this survey (e.g., evidence of pairs or breeding, number of nests, nest contents or number of fledges seen, potential threats)
1 <u>MF</u>	Date start <u>0815</u> stop <u>1000</u> total hrs <u>1.45</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>N</u>	<u>N</u>	<u>Y</u>	
2 <u>JB</u>	Date <u>6/14/03</u> Start <u>0900</u> Stop <u>1000</u> total hrs <u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>N</u>	<u>N</u>	<u>N</u>	
3 <u>CW</u>	Date <u>7/2/03</u> Start <u>0600</u> Stop <u>0800</u> total hrs <u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>N</u>	<u>N</u>	<u>N</u>	
<u>  </u>	Date start stop total hrs							
<u>  </u>	Date start stop total hrs							
Overall Site Summary (Total only resident WIFLs)		Adults	Pairs	Territories	Nests	Were any WIFLs color-banded? Yes No <u>NA</u>		
Total survey hrs <u>4.45</u>		<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	If yes, report color combination(s) in the comments section on back of form		

Name of Reporting Individual Lynn Alterman Date Report Completed 7/22/03

*Submit the original of this form. Retain a copy for your records.*

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual Lynn Alterman

Phone # 970-382-7256

Affiliation Ecosphere Environmental Services

Email alterman@ecosphere-service.com

Site Name CDOT

Did you verify that this site name is consistent with that used in previous years? Yes No (circle one)

Management Authority for Survey Area (circle one):

Federal Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) unknown private landowner

Length of area surveyed: 0.36 km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes / No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants

(entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Willow Cotton

Average height of canopy: 2-3 m (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes / No (circle one)

Distance from the site to surface water or saturated soil: 0 m (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes No (circle one)  
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary):

This site is a CDOT wetland mitigation area. The habitat is not as extensive as it appears from the highway. The habitat was created and was not directly along the Animas River.

Willow Flycatcher Survey and Detection Form (rev. 4/98)

Site Name Animal Farm N. of Durango Was site surveyed in previous year? Yes ☐ No ☒  
If yes, what site name was used? \_\_\_\_\_

County La Plata State CO USGS Quad Name Durango East

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No  
Site Coordinates: Start: N 4134983 E 0247546 UTM  
Stop: N 4138866 E 0247562 UTM  
Elevation 61574 (feet) meters (circle one) Zone 13Q

**\*\* Fill in additional site information on back of this page \*\***

Survey # Observer(s)	Date (m/d/y) Survey time	Number of WIFLs Found	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N	Cowbirds Detected? Y or N	Presence of Livestock, Recent sign Y or N	Comments about this survey (e.g., evidence of pairs or breeding, number of nests, nest contents or number of fledges seen; potential threats)
1 MF	Date 5-19-03 start 6:00 stop 10:00 total hrs 4	0	0	0	N	N	Y	
2 CW	Date 6/17/03 Start 0630 Stop 0930 total hrs 3	0	0	0	N	N	Y	Very noisy, close to highway. livestock present
3 CW	Date 7/1/03 Start 0630 Stop 0930 total hrs 3	0	0	0	N	N	Y	
	Date start stop total hrs							
	Date start stop total hrs							
Overall Site Summary (Total only resident WIFLs)		Adults	Pairs	Territories	Nests	Were any WIFLs color-banded? Yes No <u>NA</u>		
Total survey hrs <u>10</u>		0	0	0	0	If yes, report color combination(s) in the comments section on back of form		

Name of Reporting Individual Lynn Alterman Date Report Completed 7/20/03

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual Lynn Alterman Phone # 970-382-7256

Affiliation Ecosphere Environmental Services Email alterman@ecosphere-services.co

Site Name Animas River - Dow

Did you verify that this site name is consistent with that used in previous years? Yes ☐ No ☒ (circle one)

Management Authority for Survey Area (circle one): Federal Municipal/County State Tribal ☒ Private

Name of Management Entity or Owner (e.g., Tonto National Forest) multiple private

Length of area surveyed: 1.02 km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes ☒ No ☐ If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes ☐ No ☐ If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants (entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Willow, Cottonwood

Average height of canopy: 2-3 m (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes ☒ No ☐ (circle one)

Distance from the site to surface water or saturated soil: water within habitat (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes ☒ No ☐ (circle one)

If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): Water level in and adjacent to site decreased as season progressed. Area hydrology connected to Animas R water levels.



**Willow Flycatcher Survey and Detection Form (rev. 4/98)**

Site Name Animas River - State Line

If yes, what site name was used? \_\_\_\_\_

Was site surveyed in previous year? ☒ Yes ☐ No

County La Plata

State CO

USGS Quad Name Bondad Hill, Lone Mountain

*Is copy of USGS map marked with survey area and WIFL sightings attached (as required)?* ☒ Yes ☐ No

Site Coordinates: Start: N 4102440 E 0244872 UTM

Stop: N 4102110 E 0244222 UTM

Elevation 5700

Zone 13S

(feet) / meters (circle one)

**\*\* Fill in additional site information on back of this page \*\***

Survey # Observer(s)	Date (m/d/y) Survey time	Number of WIFLs Found	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N	Cowbirds Detected? Y or N	Presence of Livestock, Recent sign Y or N	Comments about this survey (e.g., evidence of pairs or breeding, number of nests, nest contents or number of fledges seen, potential threats)
1 JCL	Date 05/29 start 0900 stop 1000 total hrs 1.0	0	0	0	N	Y	N	
2 JCL	Date 6/19 Start 0820 Stop 0900 total hrs 0.67	0	0	0	N	Y	N	
3 JCL	Date 7/5 Start 0830 Stop 0915 total hrs 0.75	0	0	0	N	Y	N	
	Date start stop total hrs							
	Date start stop total hrs							
Overall Site Summary (Total only resident WIFLs)		Adults	Pairs	Territories	Nests	Were any WIFLs color-banded? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Total survey hrs 2.42		0	0	0	0	If yes, report color combination(s) in the comments section on back of form		

Name of Reporting Individual Jane + Lynn

Date Report Completed 07/11/03

*Submit the original of this form. Retain a copy for your records.*

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual Janet Lynn Phone # 970-382-7256  
Affiliation Ecosphere Environmental Services Email janetelynn@hotmail.com  
Site Name Animas River State Line

Did you verify that this site name is consistent with that used in previous years? Yes ☐ No ☒ (circle one)

Management Authority for Survey Area (circle one): Federal Municipal/County State Tribal ☒ Private

Name of Management Entity or Owner (e.g., Tonto National Forest) unknown landowners

Length of area surveyed: 0.4 Km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes ☒ No ☐ If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes ☒ No ☐ If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

- ☐ Native broadleaf plants (entirely or almost entirely, includes high-elevation willow)  
☒ Mixed native and exotic plants (mostly native)  
☐ Mixed native and exotic plants (mostly exotic)  
☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Narrowleaf Cottonwood, Coyote Willow, Russian olive

Average height of canopy: 3-4 M (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes ☒ No ☐ (circle one)  
Distance from the site to surface water or saturated soil: 0-50m (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes ☐ No ☒ (circle one)  
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary):  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Willow Flycatcher Survey and Detection Form (rev. 4/98)**

Site Name Florida River - Pete Skartvedt Was site surveyed in previous year? ☒ Yes ☐ No  
 If yes, what site name was used? \_\_\_\_\_

County La Plata State CO USGS Quad Name Bonded Hill

*Is copy of USGS map marked with survey area and WIFL sightings attached (as required)?* ☒ Yes ☐ No

Site Coordinates: Start: N 41091091 E 0846395 UTM  
 Stop: N 4108556 E 0846342 UTM Zone 13S  
 Elevation 5721 feet meters (circle one)

**\*\* Fill in additional site information on back of this page \*\***

Survey # Observer(s)	Date (m/d/y) Survey time	Number of WIFLs Found	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N	Cowbirds Detected? Y or N	Presence of Livestock, Recent sign Y or N	Comments about this survey (e.g., evidence of pairs or breeding, number of nests, nest contents or number of fledges seen; potential threats)
<sup>1</sup> JCL	Date 05/29 start 0550 stop 0830 total hrs 2.67	0	0	0	N	Y	N	
<sup>2</sup> JCL	Date 6/19 Start 0545 Stop 0800 total hrs 2.25	0	0	0	N	Y	N	
<sup>3</sup> JCL	Date 7/5/03 Start 0600 Stop 0800 total hrs 2.0	0	0	0	N	Y	N	
	Date start stop total hrs							
	Date start stop total hrs							
Overall Site Summary (Total only resident WIFLs)		Adults	Pairs	Territories	Nests	Were any WIFLs color-banded? Yes <input type="radio"/> No <input checked="" type="radio"/>		
Total survey hrs 6.92		0	0	0	0	If yes, report color combination(s) in the comments section on back of form		

Name of Reporting Individual Janet Lynn Date Report Completed 07/11/03

*Submit the original of this form. Retain a copy for your records.*

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual Janet Lynn Phone # 970-382-7256

Affiliation Ecosphere Environmental Services Email janetclynn@hotmail.com

Site Name Florida River - Pete's Place

Did you verify that this site name is consistent with that used in previous years? Yes No (circle one)

Management Authority for Survey Area (circle one): Federal Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Pete Skartvedt

Length of area surveyed: 1.3 Km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes No If no, summarize in comments below.

Additional area to the N. was covered this yr.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

- ☒ Native broadleaf plants  
(entirely or almost entirely, includes high-elevation willow)  
☐ Mixed native and exotic plants (mostly native)  
☐ Mixed native and exotic plants (mostly exotic)  
☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Coyote Willow, Narrowleaf Cottonwood

Average height of canopy: 2.5 M (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes No (circle one)

Distance from the site to surface water or saturated soil: 0-15 M (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes No (circle one)  
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary):

---

---

---

---

---

---

**Willow Flycatcher Survey and Detection Form (rev. 4/98)**

Site Name Piedra River - Navajo Co - Ariz Was site surveyed in previous year? Yes ☐ No ☒  
 If yes, what site name was used? \_\_\_\_\_

County Apache State CO USGS Quad Name 7122

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No

Site Coordinates: Start: N 4102883 E 0285608 UTM  
 Stop: N 4103470 E 0285727 UTM Zone 13E  
 Elevation 6100 (feet / meters (circle one))

**\*\* Fill in additional site information on back of this page \*\***

Survey # Observer(s)	Date (m/d/y) Survey time	Number of WIFLs Found	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N	Cowbirds Detected? Y or N	Presence of Livestock, Recent sign Y or N	Comments about this survey (e.g., evidence of pairs or breeding, number of nests, nest contents or number of fledges seen, potential threats)
<sup>1</sup> JW	Date 5/22/03 start 0600 stop 0915 total hrs 3.14	0	-	-	N	Y	N	
<sup>2</sup> JW	Date 6/11/03 Start 6:00 Stop 9:00 total hrs 3	0	-	-	N	Y	N	* heard bird "whitting" (never saw it or heard a "fitz bew")
<sup>3</sup> JCL	Date 7/4/03 Start 0600 Stop 0900 total hrs 3	0	-	-	N	Y	N	
	Date start stop total hrs							
	Date start stop total hrs							
Overall Site Summary (Total only resident WIFLs)		Adults	Pairs	Territories	Nests	Were any WIFLs color-banded? Yes <input type="radio"/> No <input checked="" type="radio"/>		
Total survey hrs <u>9.25</u>		0	0	0	0	If yes, report color combination(s) in the comments section on back of form		

Name of Reporting Individual Lynn Alterman Date Report Completed 7/14/03

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual Lynn Alterman Phone # 970-382-7256  
Affiliation Ecosphere Environmental Services Email alterman@ecosphere-services.co  
Site Name Navajo State Park Overlook

Did you verify that this site name is consistent with that used in previous years? Yes ☐ No ☒ (circle one)

Management Authority for Survey Area (circle one): ☒ Federal ☐ Municipal/County ☐ State ☐ Tribal ☐ Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Bureau of Reclamations

Length of area surveyed: 0.9 km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes ☒ No ☐ If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes ☐ No ☐ If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

- ☒ Native broadleaf plants (entirely or almost entirely, includes high-elevation willow) ☐ Mixed native and exotic plants (mostly native)  
☐ Mixed native and exotic plants (mostly exotic) ☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Coyote Willow

Average height of canopy: 3-5 m (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes ☒ No ☐ (circle one)

Distance from the site to surface water or saturated soil: 0 m (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes ☐ No ☒ (circle one)  
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary):

\* Heard probable WIFL "whiffing" (6/12)  
on east bank of Piedra  
after search, never had a visual  
and the bird never "fit-bowed"

Water level along the Piedra River decreased between surveys 1 and 5.

**Willow Flycatcher Survey and Detection Form (rev. 4/98)**

Site Name Los Pinos River - Columbus Bridge S Was site surveyed in previous year? Yes ☐ No ☒  
 If yes, what site name was used? \_\_\_\_\_

County La Plata State CO USGS Quad Name Rules Hill, CO  
Ludwig Mountain, CO

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No  
 Site Coordinates: Start: N 4134207 E 0267022 UTM  
 Stop: N 4133827 E 0267350 UTM  
 Elevation 7281 (feet) meters (circle one) Zone 13S

**\*\* Fill in additional site information on back of this page \*\***

Survey # Observer(s)	Date (m/d/y) Survey time	Number of WIFLs Found	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N	Cowbirds Detected? Y or N	Presence of Livestock, Recent sign Y or N	Comments about this survey (e.g., evidence of pairs or breeding, number of nests, nest contents or number of fledges seen; potential threats)
<sup>1</sup> JCL	Date <u>05/28</u> start <u>0557</u> stop <u>0720</u> total hrs <u>1.38</u>	Ø	Ø	Ø	N	Y	N	
<sup>2</sup> JCL	Date <u>06/04/03</u> Start <u>0545</u> Stop <u>0700</u> total hrs <u>1.25</u>	Ø	Ø	Ø	N	Y	N	
<sup>3</sup> JCL	Date <u>07/2</u> Start <u>0600</u> Stop <u>0645</u> total hrs <u>0.75</u>	Ø	Ø	Ø	N	Y	N	
	Date start stop total hrs							
	Date start stop total hrs							
Overall Site Summary (Total only resident WIFLs)		Adults	Pairs	Territories	Nests	Were any WIFLs color-banded? Yes <input type="radio"/> No <input checked="" type="radio"/>		
Total survey hrs <u>3.38</u>		Ø	Ø	Ø	Ø	If yes, report color combination(s) in the comments section on back of form		

Name of Reporting Individual Janet Lynn Date Report Completed 7/11/03

*Submit the original of this form. Retain a copy for your records.*

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual Janet Lynn Phone # 970-382-4256

Affiliation Ecosphere Environmental Services Email janetclynn@hotmail.com

Site Name Los Pinos River - Columbus Bridge S.

Did you verify that this site name is consistent with that used in previous years? Yes ☐ No ☒ (circle one)

Management Authority for Survey Area (circle one): Federal ☐ Municipal/County ☐ State ☐ Tribal ☐ Private ☒

Name of Management Entity or Owner (e.g., Tonto National Forest) River Ranch Housing Development

Length of area surveyed: 0.8 km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes ☒ / No ☐ If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes ☐ / No ☐ If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☐ Native broadleaf plants (entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☒ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Coyote Willow, Narrowleaf Cottonwood, Alder

Average height of canopy: 5M (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes ☒ No ☐ (circle one)

Distance from the site to surface water or saturated soil: 0-30M (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes ☐ No ☒ (circle one)

If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary):



**Willow Flycatcher Survey and Detection Form (rev. 4/98)**

Site Name Los Rinos River - LePlatt's Pond

Was site surveyed in previous year? Yes ☐ No ☒

If yes, what site name was used? \_\_\_\_\_

County La Plata

State CO

USGS Quad Name Bayfield, CO

*Is copy of USGS map marked with survey area and WIFL sightings attached (as required)?* ☒ Yes ☐ No

Site Coordinates: Start: N 4123535 E 0240000 UTM

Stop: N 4124641 E 0240000 UTM

Zone 13S

Elevation 6900 (feet) meters (circle one)

**\*\* Fill in additional site information on back of this page \*\***

Survey # Observer(s)	Date (m/d/y) Survey time	Number of WIFLs Found	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N	Cowbirds Detected? Y or N	Presence of Livestock, Recent sign Y or N	Comments about this survey (e.g., evidence of pairs or breeding, number of nests, nest contents or number of fledges seen; potential threats)
1 <u>JCL</u>	Date <u>05/27</u> start <u>0650</u> stop <u>1000</u> total hrs <u>3.17</u>	0	0	0	N	Y	Y/N	Some area are grazed. - Nearest River fenced off.
2 <u>JCL</u>	Date <u>06/04/03</u> Start <u>0720</u> Stop <u>1000</u> total hrs <u>2.67</u>	1	0	0	N	Y	Y	UTM of WIFLs: 13S 02408499E 41236083N
3 <u>JCL</u>	Date <u>7/7</u> Start <u>0705</u> Stop <u>0945</u> total hrs <u>2.67</u>	0	0	0	N	Y	Y	
<u> </u>	Date start stop total hrs							
<u> </u>	Date start stop total hrs							
Overall Site Summary (Total only resident WIFLs)		Adults	Pairs	Territories	Nests	Were any WIFLs color-banded? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Total survey hrs <u>8.51</u>		1	0	0	0	If yes, report color combination(s) in the comments section on back of form		

Name of Reporting Individual Jane + Lynn

Date Report Completed 07/11/03

*Submit the original of this form. Retain a copy for your records.*

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual Janet Lynn Phone # 970-382-7256  
Affiliation Ecosphere Environmental Services Email janeLclynn@hotmail.com

Site Name Los Pinos River - Le Platt's Pond  
Did you verify that this site name is consistent with that used in previous years? ☒ Yes ☐ No (circle one)

Management Authority for Survey Area (circle one): Federal ☐ Municipal/County ☐ State ☐ Tribal ☐ Private ☒

Name of Management Entity or Owner (e.g., Tonto National Forest) TBARC Ranch

Length of area surveyed: 1.2 km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? ☒ Yes ☐ No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? ☐ Yes ☐ No If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

- ☐ Native broadleaf plants (entirely or almost entirely, includes high-elevation willow)  
☒ Mixed native and exotic plants (mostly native)  
☐ Mixed native and exotic plants (mostly exotic)  
☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Coyote Narrowleaf  
Willow Cottonwood Alder

Average height of canopy: 3-5 m (specify units)

Was surface water or saturated soil present at or adjacent to site? ☒ Yes ☐ No (circle one)  
Distance from the site to surface water or saturated soil: 0-25 m (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes ☐ No ☒ (circle one)  
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): Habitat at WIFL detection site  
was narrowleaf cottonwood (avg ht = 12-15 m); alder (canopy ht 2-3m)  
with a grassy understory (1-0.5 m ht). Standing water  
was at the sight with the river 15m west. Willows near  
river were (1.5-3m ht) WIFL fit observed in response to tape.

**Willow Flycatcher Survey and Detection Form (rev. 4/98)**

Site Name San Juan River - Navajo State Park Was site surveyed in previous year? Yes ☐ No ☒  
 If yes, what site name was used? \_\_\_\_\_

County La State CO USGS Quad Name Carracas SW

*Is copy of USGS map marked with survey area and WIFL sightings attached (as required)?* ☒ Yes ☐ No

Site Coordinates: Start: N 4099031 E 0893463 UTM  
 Stop: N 4099454 E 0892116 UTM Zone 13S  
 Elevation 6200 (feet) meters (circle one)

**\*\* Fill in additional site information on back of this page \*\***

Survey # Observer(s)	Date (m/d/y) Survey time	Number of WIFLs Found	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N	Cowbirds Detected? Y or N	Presence of Livestock, Recent sign Y or N	Comments about this survey (e.g., evidence of pairs or breeding, number of nests, nest contents or number of fledges seen; potential threats)
1 LA JW 5/21/03 JL ONLY	Date 5/21/03 start 5/22/03 0600 0630 stop 1000 0800 total hrs 1.5	0	-	-	-	Y	Y	Horses grazing in upland adjacent to willow habitat
2 JW JB CW	Date 6/11 Start 6:15 Stop 10:15 total hrs 12	0	-	-	-	Y	Y	
3 JL JB CW	Date 7/3/03 Start 0615 Stop 0945 total hrs 10.5	0	-	-	-	Y	Y	horses
	Date start stop total hrs							
	Date start stop total hrs							
Overall Site Summary (Total only resident WIFLs)		Adults	Pairs	Territories	Nests	Were any WIFLs color-banded? Yes <input type="radio"/> No <input checked="" type="radio"/>		
Total survey hrs 37.5		0	0	0	0	If yes, report color combination(s) in the comments section on back of form		

Name of Reporting Individual Lynn Alterman Date Report Completed 7/14/03

**Submit the original of this form. Retain a copy for your records.**

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual Lynn Alterman Phone # 970-382-7256

Affiliation Ecosphere Environmental Services Email alterman@ecosphere-services.com

Site Name San Juan River - Navajo State Park

Did you verify that this site name is consistent with that used in previous years? Yes ☐ No ☒ (circle one)

Management Authority for Survey Area (circle one): ☒ Federal ☐ Municipal/County ☐ State ☐ Tribal ☐ Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Bureau of Reclamations

Length of area surveyed: 1.5 km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes ☒ No ☐ If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes ☐ No ☐ If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

- ☒ Native broadleaf plants (entirely or almost entirely, includes high-elevation willow) ☐ Mixed native and exotic plants (mostly native)  
☐ Mixed native and exotic plants (mostly exotic) ☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Coyote Willow, <sup>Neotoma</sup> Cottonwood

Average height of canopy: 3-5 m (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes ☒ No ☐ (circle one)

Distance from the site to surface water or saturated soil: 0 m (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes ☒ No ☐ (circle one)  
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): Water 20' along the San Juan River  
between survey parcels 1 and 3.

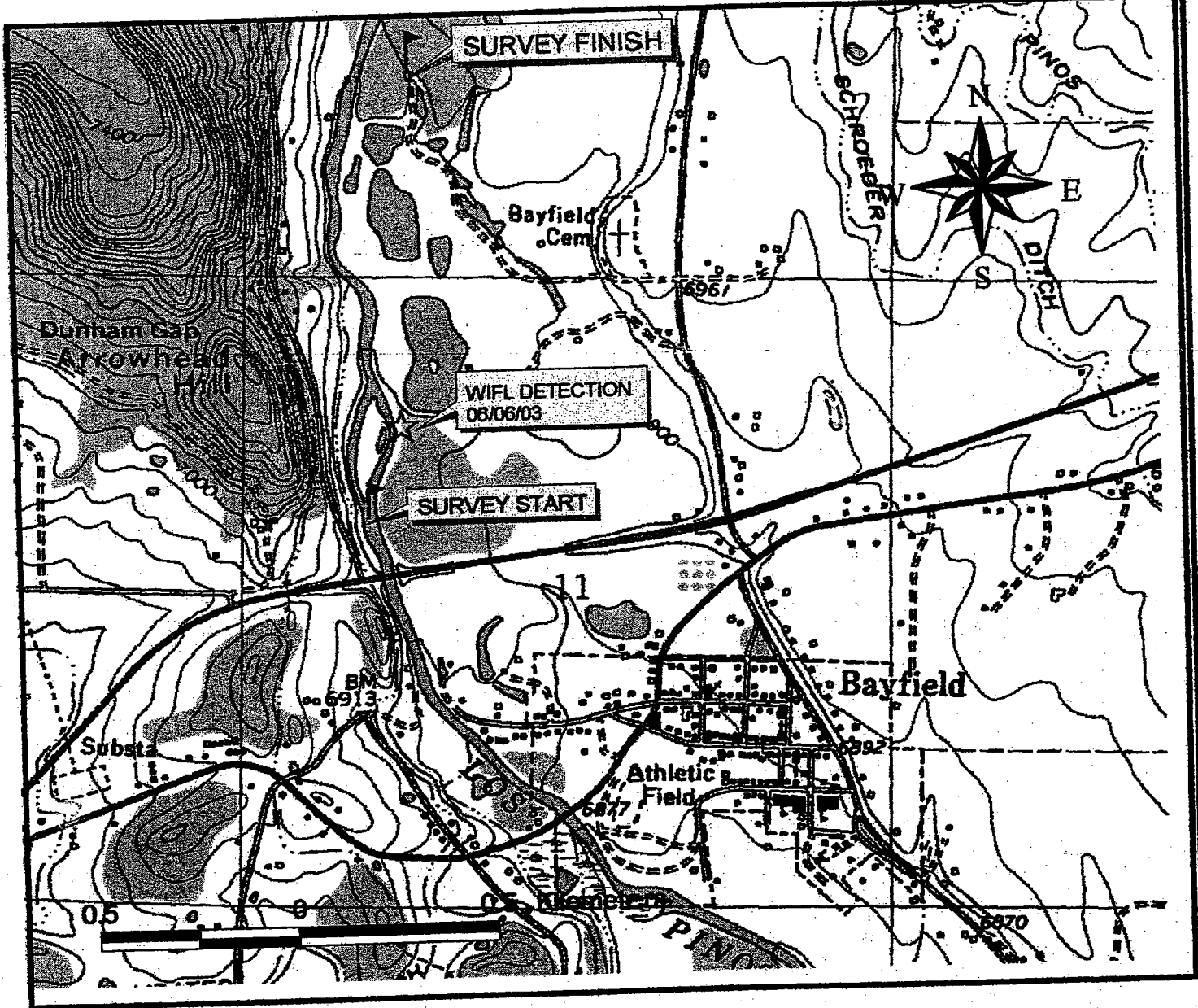
## **APPENDIX D**

### **MAPS OF SOUTHWESTERN WILLOW FLYCATCHER DETECTIONS IN THE SAN JUAN RECOVERY UNIT**

---

USGS 7.5 MINUTE  
TOPOGRAPHIC  
SURVEY MAP

BAYFIELD  
QUADRANGLE  
LA PLATA COUNTY  
COLORADO



## LEGEND

- ☆ WIFL Detection in 1st period
- ☆ WIFL Detection in 2nd period
- ☆ WIFL Detection in 3rd period
- ▲ WIFL Nest Detection

COLORADO

COLORADO DIVISION OF WILDLIFE  
SOUTHWESTERN WILLOW FLYCATCHER DETECTION SITES  
LOS PINOS RIVER/LE PLATT'S POND

WIFL DETECTION  
MAP

Prepared By:  
Ecosystem Environmental  
Services

## **APPENDIX E**

### **AVIAN SPECIES LISTS FOR SOUTHWESTERN WILLOW FLYCATCHER SURVEY AREAS IN THE SAN JUAN RECOVERY UNIT**

**Species list for the Animas River Valley (Dalton Ranch, CDOT Wildlife Area, Animas River North of Durango).**

Great Blue Heron	<i>Ardea herodias</i>
Mallard	<i>Anas platyrhynchos</i>
American Coot	<i>Fulica Americana</i>
Spotted Sandpiper	<i>Actitis macularia</i>
Black-chinned Hummingbird	<i>Archilochus alexandri</i>
Broad-tailed Hummingbird	<i>Selasphorus platycercus</i>
Rufous Hummingbird	<i>Selasphorus rufus</i>
Northern Flicker	<i>Colaptes auratus</i>
Western Wood-Pewee	<i>Contopus sordidulus</i>
Tree Swallow	<i>Tachycineta bicolor</i>
Bank Swallow	<i>Riparian riparia</i>
House Wren	<i>Troglodytes aedon</i>
American Robin	<i>Turdus migratorius</i>
Gray Catbird	<i>Dumetella carolinensis</i>
Yellow Warbler	<i>Dendroica petechia</i>
Green-tailed Towhee	<i>Pipilo chlorurus</i>
Song Sparrow	<i>Melospiza melodia</i>
Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>
Blue Grosbeak	<i>Guiraca caerulea</i>
Lazuli Bunting	<i>Passerina amoena</i>
Red-winged Blackbird	<i>Agelaius phoeniceus</i>
Brown-headed Cowbird	<i>Molothrus ater</i>
Bullock's Oriole	<i>Icterus bullockii</i>
House Finch	<i>Carpodacus mexicanus</i>
Lesser Goldfinch	<i>Carduelis psaltria</i>

**Species list for the Animas River, State Line survey area.**

Western Wood-Pewee	<i>Contopus sordidulus</i>
Western Kingbird	<i>Tyrannus verticalis</i>
Tree Swallow	<i>Tachycineta bicolor</i>
House Wren	<i>Troglodytes aedon</i>
American Robin	<i>Turdus migratorius</i>
Cedar Waxwing	<i>Bombycilla cedrorum</i>
Yellow Warbler	<i>Dendroica petechia</i>
Yellow-breasted Chat	<i>Icteria virens</i>
Spotted Towhee	<i>Pipilo maculatus</i>
Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>
Blue Grosbeak	<i>Guiraca caerulea</i>
Brown-headed Cowbird	<i>Molothrus ater</i>
Bullock's Oriole	<i>Icterus bullockii</i>
American Goldfinch	<i>Carduelis tristis</i>



**Species list for the Florida River, Skardvedt survey area.**

Great Blue Heron	<i>Ardea herodias</i>
Canada Goose	<i>Branta canadensis</i>
Mallard	<i>Anas platyrhynchos</i>
Common Merganser	<i>Mergus merganser</i>
Black Rail	<i>Laterallus jamaicensis</i>
Killdeer	<i>Charadrius vociferous</i>
Mourning Dove	<i>Zenaida macroura</i>
Western Wood-Pewee	<i>Contopus sordidulus</i>
Western Kingbird	<i>Tyrannus verticalis</i>
Tree Swallow	<i>Tachycineta bicolor</i>
House Wren	<i>Troglodytes aedon</i>
American Robin	<i>Turdus migratorius</i>
Cedar Waxwing	<i>Bombycilla cedrorum</i>
Yellow Warbler	<i>Dendroica petechia</i>
Common Yellowthroat	<i>Geothlypis trichas</i>
Yellow-breasted Chat	<i>Icteria virens</i>
Spotted Towhee	<i>Pipilo maculatus</i>
Song Sparrow	<i>Melospiza melodia</i>
Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>
Blue Grosbeak	<i>Guiraca caerulea</i>
Red-winged Blackbird	<i>Agelaius phoeniceus</i>
Brewer's Blackbird	<i>Euphagus cyanocephalus</i>
Brown-headed Cowbird	<i>Molothrus ater</i>
Bullock's Oriole	<i>Icterus bullockii</i>
House Finch	<i>Carpodacus mexicanus</i>
American Goldfinch	<i>Carduelis tristis</i>

**Species list for the Piedra River, Navajo State Park survey area.**

Mallard	<i>Anas platyrhynchos</i>
Bewick's Wren	<i>Thryomanes bewickii</i>
Blue-gray Gnatcatcher	<i>Poliophtila caerulea</i>
Yellow Warbler	<i>Dendroica petechia</i>
Wilson's Warbler	<i>Wilsonia pusilla</i>
Common Yellowthroat	<i>Geothlypis trichas</i>
Spotted Towhee	<i>Pipilo maculatus</i>
Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>
Red-winged Blackbird	<i>Agelaius phoeniceus</i>
Brown-headed Cowbird	<i>Molothrus ater</i>

**Species list for the Pine River, Columbus Bridge survey area.**

Great Blue Heron	<i>Ardea herodias</i>
Western Wood-Pewee	<i>Tyrannus sordidulus</i>
Cordilleran Flycatcher	<i>Empidonax occidentalis</i>
Warbling Vireo	<i>Vireo gilvus</i>
Tree Swallow	<i>Tachycineta bicolor</i>
House Wren	<i>Troglodytes aedon</i>
American Robin	<i>Turdus migratorius</i>
Yellow Warbler	<i>Dendroica petechia</i>
Song Sparrow	<i>Melospiza melodia</i>
Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>
Brown-headed Cowbird	<i>Molothrus ater</i>

**Species list for the Pine River, LePlatt's Pond survey area.**

Great Blue Heron	<i>Ardea herodias</i>
Canada Goose	<i>Branta canadensis</i>
Osprey	<i>Pandion haliaetus</i>
Red-tailed Hawk	<i>Buteo jamaicensis</i>
Spotted Sandpiper	<i>Actitis macularia</i>
Mourning Dove	<i>Zenaidura macroura</i>
Western Wood-Pewee	<i>Tyrannus sordidulus</i>
Willow Flycatcher	<i>Empidonax traillii</i>
Cordilleran Flycatcher	<i>Empidonax occidentalis</i>
Warbling Vireo	<i>Vireo gilvus</i>
Steller's Jay	<i>Cyanocitta stelleri</i>
Black-billed Magpie	<i>Pica pica</i>
Tree Swallow	<i>Tachycineta bicolor</i>
White-breasted Nuthatch	<i>Sitta carolinensis</i>
House Wren	<i>Troglodytes aedon</i>
American Robin	<i>Turdus migratorius</i>
Gray Catbird	<i>Dumetella carolinensis</i>
Cedar Waxwing	<i>Bombycilla cedrorum</i>
Yellow Warbler	<i>Dendroica petechia</i>
Western Tanager	<i>Piranga ludoviciana</i>
Song Sparrow	<i>Melospiza melodia</i>
Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>
Brown-headed Cowbird	<i>Molothrus ater</i>
American Goldfinch	<i>Carduelis tristis</i>

**Species list for the San Juan River, Navajo State Park survey area.**

Great Blue Heron	<i>Ardea herodias</i>
Canada Goose	<i>Branta canadensis</i>
Mallard	<i>Anas platyrhynchos</i>
Virginia Rail	<i>Rallus limicola</i>
Spotted Sandpiper	<i>Actitis macularia</i>
Mourning Dove	<i>Zenaida macroura</i>
Broad-tailed Hummingbird	<i>Selasphorus platycercus</i>
Northern Flicker	<i>Colaptes auratus</i>
Western Wood-Pewee	<i>Contopus sordidulus</i>
Western Kingbird	<i>Tyrannus verticalis</i>
Warbling Vireo	<i>Vireo gilvus</i>
Pinyon Jay	<i>Gymnorhinus cyanocephalus</i>
Violet-green Swallow	<i>Tachycineta thalassina</i>
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>
Blue-gray Gnatcatcher	<i>Poliophtila nigriceps</i>
House Wren	<i>Troglodytes aedon</i>
American Robin	<i>Turdus migratorius</i>
European Starling	<i>Sturnus vulgaris</i>
Yellow Warbler	<i>Dendroica petechia</i>
Wilson's Warbler	<i>Wilsonia pusilla</i>
Common Yellowthroat	<i>Geothlypis trichas</i>
Yellow-breasted Chat	<i>Icteria virens</i>
Spotted Towhee	<i>Pipilo maculatus</i>
Song Sparrow	<i>Melospiza melodia</i>
Western Tanager	<i>Piranga ludoviciana</i>
Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>
Red-winged Blackbird	<i>Agelaius phoeniceus</i>
Brown-headed Cowbird	<i>Molothrus ater</i>
Bullock's Oriole	<i>Icterus bullockii</i>
House Finch	<i>Carpodacus mexicanus</i>
American Goldfinch	<i>Carduelis tristis</i>